PLANTING GUIDE

'WETLANDER' GIANT CUTGRASS

Zizaniopsis miliacea

Description: Wetlander giant cutgrass is a coarse perennial grass with extensive creeping rhizomes. Stems are elongated and mostly flat; up to 3 feet long and to 2 inches wide. The leaves may be smooth in the center but otherwise are rough, especially on the margins. The male spikelets are separate from the female spikelets, but occur on the same panicle branches. The female spikelets are at the tips of the panicle branches with male spikelets lower on the panicle branch. The seeds fall from the panicle as they begin to ripen, making seed harvest difficult.

The seedhead culms bend over to touch the water about the time of seed ripening. These culms will root at each node to produce new plants vegetatively.

Conservation Use: Wetlander Giant Cutgrass can be can be used in constructed welands to treat agricultural non-point source pollution, to treat the effluent from small towns, communities and for residences where septic tank systems have failed, and for the creation and restoration of wetlands.

Habitat: It occurs as an emergent in marshes, in swamps, and on shorelines, usually in shallow water. Adapted to freshwater sites but will tolerate water salinity of up to 1 percent.

Distribution: Giant Cutgrass is a warm season grass that occurs in wetland sites along the Gulf Coast and Atlantic Coast from Houston, Texas to about Washington, D.C. It grows inland along the Atlantic and Gulf coasts and up the Mississippi River delta area to Kentucky. It also grows inland on fresh water sites to Little Rock, Texarkana, Abiliene, San Angelo and San Antonio. Plant growth regions 1, 2, 3, 6.

WETLANDER is a selection made from a collection made along the South Atlantic and Gulf coastal areas.

Field planting trials have been made in constructed wetlands in Alabama and Georgia.

Plant Spacing: The desirable spacing for constructed wetlands is on 6 to 8 feet centers. Planting distance can be as much as 6 to 8 feet apart in the row with rows 6 feet apart.

Plantina Methods: WETLANDER can be planted vegetatively by hand with a tree dibble, or mechanically with a tractor drawn tree planter, or a ditch witch, on good sites that are accessible with mechanical equipment.

Plantina Time: WETLANDER should be planted vegetatively with nursery grown plants from March 1 to June 30 in the southeast. Be sure to keep the substrate moist for about six weeks with good quality water, well or lake sources, and not the lagoon wastewater.

Fertilization: None required for constructed wetlands.

Site Preparation: The bottom of constructed wetlands that have a heavy clay substrates should be backfilled with about six inches of good soil that will provide a good planting medium to support root growth and development. During construction the bottom must be level to allow a uniform water depth.

Water Level Manaaement: Keep the site moist after planting with good quality water from a well on lake. Do not use the lagoon wastewater as a source of water for the transplated materials because of the high nutrient concentration. Do not allow the water to flood the new plants within the first six weeks. During the seventh week, begin to gradually, very slowly acclimate the plant material to increased depth by applying about one inch per week for six weeks. At the end of the twelth week, the desired water level of six to seven inches can be obtained without causing any damage to the plants.

Wastewater from the animal waste lagoon can be loaded or distributed continuously to the wetlands at a rate of ***8,600*** gal per day per acre.

At no time should water levels overtop the plants. In contrast, water levels for emergent plants should never be lowered to the extent that the plant roots become exposed. Dry substrate conditions in the constructed wetland (substate) will result in poor plant survival, growth and development.

Plant Sources: WETLANDER will be available from most commercial nurseries in the southeast that handle wetland plants in **1994.** For a quick reference check the wetland plant source database.

WETLANDER will be maintained by the Americus, Georgia Plant Materials Center. Generation **1** plants will be provided to commercial nurseries form which plants may be produced vegetatively for increase and commercial distribution.

REFERENCES

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